

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-101

Revised February 10, 1999

Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copies

Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address CHEVRON USA INC 15 SMITH RD, MIDLAND, TX 79705		² OGRID Number 4323
⁴ Property Code 02594	⁵ Property Name J.N. CARSON (NCT-C)	³ API Number 30-025-06835
		⁶ Well No. 8

⁷ Surface Location									
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
I	28	21-S	37-E		1980'	SOUTH	990'	EAST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface									
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
⁹ Proposed Pool 1 PENROSE SKELLY GRAYBURG					¹⁰ Proposed Pool 2				

¹¹ Work Type Code E	¹² WellType Code O	¹³ Rotary or C.T. ROTARY	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3435'
¹⁶ Multiple No	¹⁷ Proposed Depth 7743'	¹⁸ Formation GRAYBURG	¹⁹ Contractor	²⁰ Spud Date 3/31/2005

²¹ Proposed Casing and Cement Program					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
NO CHANGE					

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

CHEVRON U.S.A. INC. INTENDS TO RECOMPLETE THE SUBJECT WELL FROM THE HARE SAN ANDRES FIELD TO THE PENROSE SKELLY GRAYBURG FIELD AND RESERVOIR. ***A PIT WILL NOT BE USED IN THE RECOMPLETION. A STEEL FRAC TANK WILL BE UTILIZED*** THE CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.

THE INTENDED PROCEDURE IS ATTACHED.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway
Re-Entry

RECEIVED
HOBBS
NM
MAR 10 2005

²³ I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: Denise Pinkerton		Approved By: [Signature]	
Printed Name: Denise Pinkerton		Title: PETROLEUM ENGINEER	
Title: Regulatory Specialist		Approval Date: MAR 29 2005	Expiration Date:
Date: 3/24/2005	Telephone: 432-687-7375	Conditions of Approval: Attached <input type="checkbox"/>	

J. N. Carson (NCT-C) # 8
Penrose Skelly Field
T21S, R37E, Section 28
Job: Reenter And Complete In Grayburg Formation

Procedure:

1. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. AGU, EMSU, and EMSUB buried fiberglass lines will be tested with 300 psi. All polypipe (SDR7 and SDR11) will be tested w/100 psi. All steel lines will be tested w/500 psi. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report.
2. Repair well location and lease road. Dig out around cut off csg strings. Weld on new csg and tubing heads. MI & RU workover unit. Install BOP's and test to 1000 psi. PU 6 1/4" MT bit, DC's, and 2 7/8" work string. Establish reverse circulation using 8.6 PPG cut brine. Drill out cement plug in 7" casing from surface to 350'. LD and cleanout 7" casing to 1180'. Reverse circulate well clean from 1180'. Pressure test csg to 500 psi. LD and drill out cement plug in 7" casing from 1180' to 1400'. LD and cleanout 7" casing to 2565'. Reverse circulate well clean from 2565'. Pressure test csg to 500 psi. LD and drill out cement plug in 7" casing from 2565' to 2853'. LD and cleanout 7" casing to 3382'. Reverse circulate well clean from 3382'. Pressure test csg to 500 psi. LD and drill out cement plugs in 7" casing from 3382' to 3623' and from 3829' to 3960'. Reverse circulate well clean from 3960'. POH with 2 7/8" work string, DC's, and 6 1/4" bit. LD DC's and bit. **Note: If any set of sqzd perfs fails pressure test, cmt squeeze before drilling ahead and uncovering next set of sqzd perfs. Also, well will be a producer, so a slight pressure loss is acceptable.**
3. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/CBL/CCL log from 3960' up to 2600'. POH. Inspect logs for good cement bond from approximately 3960' up to 3500'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. Cmt squeeze as necessary to obtain good cmt across completion interval. GIH with 3 1/8" DP slick casing gun and perforate from 3638-44', 3656-62', 3670-78', 3684-88', 3694-3702', 3714-18', 3728-36', 3745-50', 3760-68', 3774-78', 3783-88', 3800-08', 3816-20', 3834-42', 3848-56', and 3874-80' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. RD & release electric line unit. **Note: Use casing collars from Lane Wells GR/Neutron Log dated 4/1/63 for depth correction.**
4. PU and GIH w/ 7" PPI pkr (with 10' element spacing) and SCV on 2 7/8" work string to approximately 3625'. Test tbg to 5500 psi while GIH.
5. MI & RU DS Services. Acidize perfs 3638-3880' with 3,200 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **3500 psi**. Spot

acid across perfs at beginning of each stage and let soak to lower breakdown pressure and prevent communication. Pump job as follows:

Interval	Amt. Acid	Max Rate	PPI Setting
3874-80'	200 gals	½ BPM	3872-82'
3848-56'	200 gals	½ BPM	3847-57'
3834-42'	200 gals	½ BPM	3833-43'
3816-20'	200 gals	½ BPM	3814-24'
3800-08'	200 gals	½ BPM	3799-3809'
3783-88'	200 gals	½ BPM	3780-90'
3774-78'	200 gals	½ BPM	3770-80'
3760-68'	200 gals	½ BPM	3759-69'
3745-50'	200 gals	½ BPM	3742-52'
3728-36'	200 gals	½ BPM	3727-37'
3714-18'	200 gals	½ BPM	3710-20'
3694-3702'	200 gals	½ BPM	3693-3703'
3684-88'	200 gals	½ BPM	3680-90'
3670-78'	200 gals	½ BPM	3669-79'
3656-62'	200 gals	½ BPM	3654-64'
3638-44'	200 gals	½ BPM	3636-46'

Displace acid with 8.6 PPG cut brine water -- do not overdisplace. Use a SCV to control displacement fluid. Record ISIP, 5 & 10 minute SIP's. RD and release DS services. **Note:** Pickle tubing in 1 run of 500 gals acid, prior to acidizing perfs. Pickle acid is to contain only 1/2 gal A264 and 1 gal W53. Also, if communication occurs during treatment of any interval, monitor casing pressure and attempt to complete stage w/o exceeding 350 psi csg pressure. If cannot, then move PPI to next setting depth and combine treatment volumes of the intervals. Do not exceed 350 psi casing pressure due to cmt sqzd perfs in wellbore.

* Acid system is to contain:	1 GPT A264	Corrosion Inhibitor
	8 GPT L63	Iron Control Agent
	2 PPT A179	Iron Control Aid
	20 GPT U66	Mutual Solvent
	2 GPT W53	Non-Emulsifier

6. Release PPI pkr and PUH to approximately 3625'. Swab back all intervals together. Recover 100% of treatment and load volumes before shutting well in for night, if possible. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. **Note:** Selectively swab perfs as directed by Engineering if excessive water is produced.
7. Open well. Release PPI pkr. POH with tbg and PPI packer. LD PPI tool.
8. PU and GIH w/ 7" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile and 118 jts. of 3 ½" EUE 8R L-80 work string, testing to 7500 psi. Set pkr at approximately 3550'. Install frac head.

Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

9. MI & RU DS Services. Frac well down 3 ½" tubing at **40 BPM** with 84,000 gals of YF130, 160,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR1630 proppant. Observe a maximum surface treating pressure of **7500 psi**. Pump job as follows:

Pump 2,000 gals 2% KCL water containing 55 gals Baker RE 4777-SCW Scale Inhibitor

Pump 1,000 gals 2% KCL water spacer

Pump 14,000 gals YF130 pad containing 5 GPT J451 Fluid Loss Additive

Pump 14,000 gals YF130 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive

Pump 12,000 gals YF130 containing 1.5 PPG 16/30 mesh Jordan Sand

Pump 12,000 gals YF130 containing 2.5 PPG 16/30 mesh Jordan Sand

Pump 12,000 gals YF130 containing 3.5 PPG 16/30 mesh Jordan Sand

Pump 14,000 gals YF130 containing 4.5 PPG 16/30 mesh Jordan Sand

Pump 6,000 gals YF130 containing 5 PPG **resin-coated** 16/30 mesh CR1630 proppant.

Flush to 3602' with 1,386 gals WF130. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services. **Leave well SI overnight.**

10. Open well. GIH and swab well until there is no sand inflow. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Release pkr and POH with 3 ½" work string. Lay down work string and pkr.
11. PU and GIH with 6 ¼" MT bit on 2 7/8" work string to 3960'. If fill is found above 3900', clean out fill to 3960' using 8.6 PPG cut brine water and air unit (if necessary). POH with 2 7/8" work string and bit. LD 2 7/8" work string and bit.
12. PU and GIH w/ Centrilift sub pump assembly, drain sub, 2 7/8" x 6' tbg sub, SN, and 121 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Suspend tbg with bottom of sub pump assembly at approximately 3808'.
13. Remove BOP's and install WH. RD & release workover unit.
14. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH

3/17/2005

Well: **J. N. Carson (NCT-C) # 8**
(formerly CDU # 100 WS)

Field: **Hare**

Reservoir: **San Andres**

Current
Wellbore Diagram

Location:
1980' FSL & 990' FEL
Section: 28
Township: 21S
Range: 37E Unit: I
County: Lea State: NM

Elevations:
GL: 3435'
KB:
DF:

Well ID Info:
Chevno: FA7932
API No: 30-025-06835
L5/L6: U900500
Spud Date: 6/1/49
Compl. Date: 8/2/49

Surf. Csg: 13 3/8" 48#, H-40
Set: @ 300' w/300 sx cmt
Hole Size: 17 1/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

(Top of Salt @ 1170')

(Base of Salt @ 2400')

Blk Sqz Perfs @ 350'

Blk Sqz Perfs @ 1400'

Interm. Csg: 9 5/8" 36#, H40
Set: @ 2800' w/ 1300 sx cmt
Hole Size: 12 1/4"
Circ: No **TOC:** 1275'
TOC By: Temperature Survey

Blk Sqz Perfs @ 2800'
(CN pump in with 2000 psi)

CIBP @ 3995'
(166' cmt on top)

CIBP & Setting Tool @ 4480'

CIBP @ 4895'
(2 sx cmt on top)

4055-64'	San Andres - Open
4238-45'	San Andres - Open
4285-92'	San Andres - Open
4357-64'	San Andres - Open
4435-45'	San Andres - Open
4555-65'	San Andres - Open
4726-34'	San Andres - Open
4785-95'	San Andres - Open

5751-5859' Blinebry Gas - Below CIBP

CIBP @ 7200'
(2 sx cmt on top)

Prod. Csg: 7", 23#, J-55, N-80
Set: @ 7374' w/ 700 sx cmt
Hole Size: 8 3/4"
Circ: No **TOC:** 2800'
TOC By: Temperature Survey

7565-7723' Brunson Ellenburger - Below CIBP

PBTD: surface
TD: 7743'

5 1/2" OD 18# J-55 & H-40
Liner f/ 7325-7743'. (6 1/4" hole)
Cmtd w/63 sx. Cmt Circ.

Updated: 3/15/05

By: A. M. Howell

Well: **J. N. Carson (NCT-C) # 8**
(formerly CDU # 100 WS)

Field: **Penrose Skelly**

Reservoir: **Grayburg**

Proposed Wellbore Diagram

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1980' FSL & 990' FEL
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Blk Sqz Perfs @ 1400'

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TOC By: Temperature Survey

Blk Sqz Perfs @ 2800'
(CN pump in with 2000 psi)

(Top of Salt @ 1170')

(Base of Salt @ 2400')

Tubing Detail:

#Jts.	Size:	Footage
	KB Correction	14.00
121	Jts. 2 7/8" J-55 Cl. 'B'	3751.00
	2 7/8" x 6" Tbg Sub	6
	Drain Valve	0.55
	2 7/8" x 2 3/8" X-Ove	0.60
	Centriflgt Sub Pump	35.41
121	Bottom Of Mtr >>	3807.56

Perfs:	Status
3638-44'	Grayburg - Open
3656-62'	Grayburg - Open
3670-78'	Grayburg - Open
3684-88'	Grayburg - Open
3694-3702'	Grayburg - Open
3714-18'	Grayburg - Open
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Updated: 3/15/05

By: A. M. Howell

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Revised February 10, 1999

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Fee Lease - 3 Copie

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-06835		² Pool Code 50350		³ Pool Name PENROSE SKELLY GRAYBURG	
⁴ Property Code 02594		⁵ Property Name J.N. CARSON (NCT-C)			⁶ Well No. 8
⁷ OGRID Number 4323		⁸ Operator Name CHEVRON USA INC			⁹ Elevation 3435'

¹⁰ Surface Location

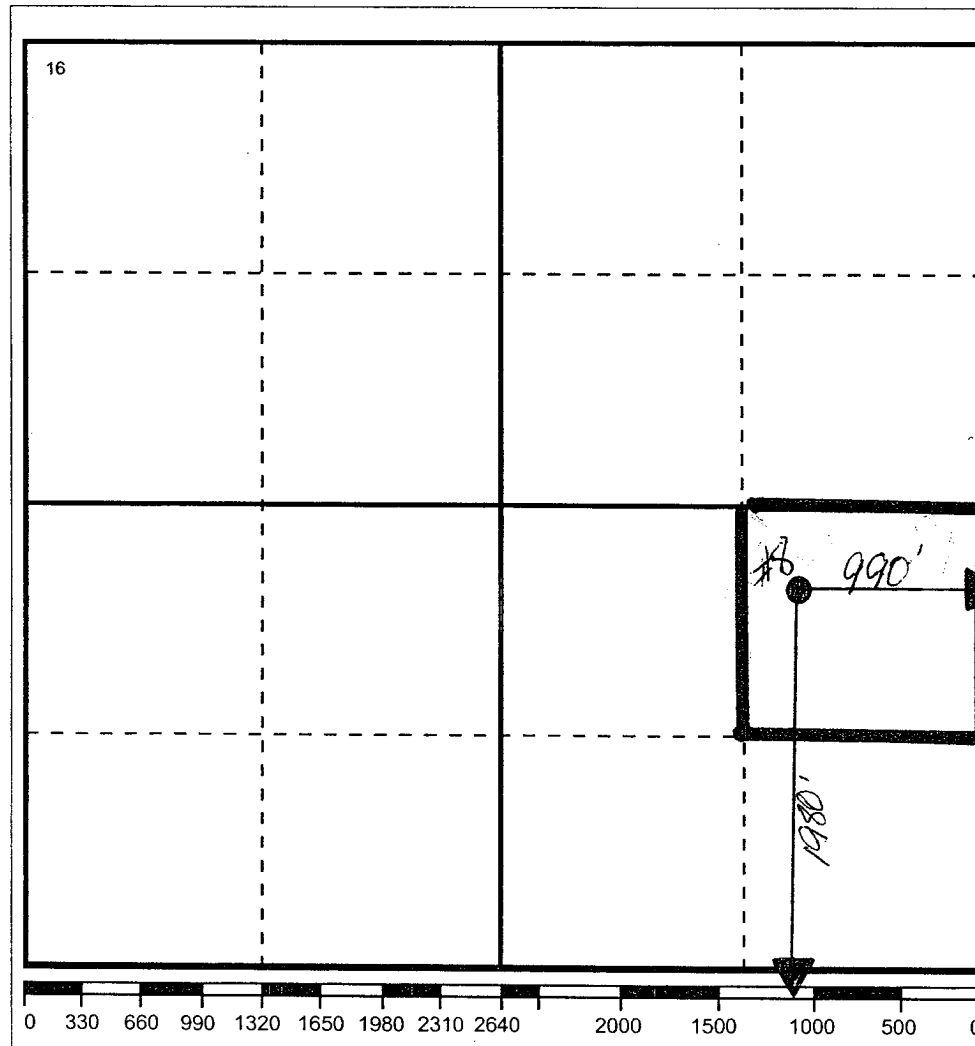
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I	28	21-S	37-E		1980'	SOUTH	990'	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County

¹² Dedicated Acre 40	¹³ Joint or Infill No	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
 OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

Printed Name

Denise Pinkerton

Positio

Regulatory Specialist

Date

3/24/2005

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Signature & Seal of
Professional Surveyor

Certificate No.